



CURRENT TRENDS - MEASLES 1966

(Continued from front page)

The number of cases reported each week in 1966 has to date been consistently less than the totals reported for the comparable weeks in past years. The increased total reported for the 48th week reflects the expected increased seasonal incidence.

The counties reporting the highest numbers of measles cases for October 15 through November 26 are listed in Table 1. Inclusion in this table is dependent upon the number of cases occurring for two consecutive weeks and upon county population. An asterisk indicates the introduction of epidemic control measures or community immunization programs in the county.

(Reported by Childhood Viral Diseases Unit, Epidemiology Branch, CDC.)

Allegheny County, Pennsylvania

In a county-wide measles program held in Allegheny County, Pennsylvania, on December 4, 1966, an estimated 75 percent of the susceptible children (approximately 52,000) in the age group 1 through 8 years were immunized. An additional 1,700 children 9 years of age and over also received the live attenuated measles vaccine. The 57 immunization clinics located throughout the County (which

includes Pittsburgh) were operated by physicians, nurses, and other volunteers. The community program was sponsored by the Allegheny County Medical Society and the Allegheny County Medical Society Foundation in cooperation with the Allegheny County Health Department.

(Reported by Dr. F.B. Clack, Acting Administrator, Allegheny County Health Department; and Dr. W.D. Schrack, Jr., Director, Division of Communicable Diseases and State Epidemiologist, Pennsylvania Department of Health.)

Durham County, North Carolina

Since November 1, 1966, 75 cases of measles have been reported to the North Carolina State Board of Health from Durham County (Pop. 118,000). Results of a school survey conducted in this County during the last week of November indicated that since mid-October, 115 cases of school absenteeism due to measles had occurred. Ninety-five cases were from 9 of the 15 city schools and 50 of these cases were concentrated in 2 schools. The remaining 20 cases were in 6 of the 13 county schools, with 11 of these cases in one school. The last major outbreak of measles in Durham County was in 1961.

CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
(Cumulative totals include revised and delayed reports through previous weeks)

| DISEASE                                      | 48th WEEK ENDED     |                     | MEDIAN<br>1961 - 1965 | CUMULATIVE, FIRST 48 WEEKS |         |                       |
|--|---------------------|---------------------|-----------------------|----------------------------|---------|-----------------------|
|  | DECEMBER 3,<br>1966 | DECEMBER 4,<br>1965 |                       | 1966                       | 1965    | MEDIAN<br>1961 - 1965 |
| Aseptic meningitis                           | 52                  | 47                  | 39                    | 2,781                      | 1,999   | 2,003                 |
| Brucellosis                                  | 12                  | 1                   | 7                     | 224                        | 224     | 362                   |
| Diphtheria                                   | -                   | -                   | 5                     | 182                        | 147     | 251                   |
| Encephalitis, primary:                       |                     |                     |                       |                            |         |                       |
| Arthropod-borne & unspecified                | 37                  | 30                  | ---                   | 1,999                      | 1,775   | ---                   |
| Encephalitis, post-infectious                | 11                  | 8                   | ---                   | 677                        | 618     | ---                   |
| Hepatitis, serum                             | 35                  |                     |                       | 1,344                      |         |                       |
| Hepatitis, infectious                        | 733                 | 751                 | 751                   | 29,806                     | 31,175  | 39,642                |
| Measles (rubeola)                            | 1,472               | 2,634               | 2,634                 | 197,830                    | 253,379 | 405,590               |
| Poliomyelitis, Total (including unspecified) | 3                   | -                   | 5                     | 93                         | 56      | 417                   |
| Paralytic                                    | 3                   | -                   | 5                     | 88                         | 42      | 358                   |
| Nonparalytic                                 | -                   | -                   | ---                   | -                          | 9       | ---                   |
| Meningococcal infections, Total              | 48                  | 69                  | 41                    | 3,178                      | 2,801   | 2,165                 |
| Civilian                                     | 46                  | 62                  | ---                   | 2,873                      | 2,600   | ---                   |
| Military                                     | 2                   | 7                   | ---                   | 305                        | 201     | ---                   |
| Rubella (German measles)                     | 376                 | ---                 | ---                   | 44,495                     | ---     | ---                   |
| Streptococcal sore throat & Scarlet fever    | 9,107               | 8,230               | 6,331                 | 385,685                    | 358,625 | 309,615               |
| Tetanus                                      | 9                   | 7                   | ---                   | 184                        | 259     | ---                   |
| Tularemia                                    | 2                   | -                   | ---                   | 162                        | 230     | ---                   |
| Typhoid fever                                | 6                   | 15                  | 11                    | 354                        | 422     | 499                   |
| Typhus, tick-borne (Rky. Mt. Spotted fever)  | -                   | 2                   | ---                   | 242                        | 260     | ---                   |
| Rabies in Animals                            | 69                  | 77                  | 61                    | 3,732                      | 3,979   | 3,477                 |

NOTIFIABLE DISEASES OF LOW FREQUENCY

|  | Cum. |                                      | Cum. |
|--|------|--------------------------------------|------|
| Anthrax  | 6    | Botulism                             | 10   |
| Leptospirosis: Wash-1, Puerto Rico-1                             | 63   | Trichinosis: Calif-1, N.J.-3         | 94   |
| Malaria: Calif-4, La-1, Md-1, Miss-1, NC-3, Ohio-1, Pa-4, Utah-1 | 456  | Rabies in Man                        | 1    |
| Psittacosis  | 44   | Rubella, Congenital Syndrome: Minn-2 | 23   |
| Typhus, murine   | 26   | Plague                               | 5    |

Table 1  
Counties Reporting Highest Number of Measles Cases

| County †      | State        | Pop (000)<br>(1960 Census) | Number of Measles Cases for Week Ending |    |    |          |    |    |     |  |
|---------------|--------------|----------------------------|---|----|----|----------|----|----|-----|--|
|               |              |                            | October                                 |    |    | November |    |    |     |  |
|               |              |                            | 15                                      | 22 | 29 | 5        | 12 | 19 | 26  |  |
| II King       | Washington   | 935                        | 15                                      | 17 | 6  | 41       | 6  | 48 | 38  |  |
| III Spokane   | Washington   | 278                        | 19                                      | 14 | 23 | 42       | 24 | 60 | 14  |  |
| Snohomish     | Washington   | 172                        | 71                                      | 55 | 95 | 60       | 3  | 89 | 25* |  |
| Galveston     | Texas        | 140                        | 24                                      | 59 | 16 | 9        | -  | 12 | 2   |  |
| IV Washington | Oregon       | 92                         | -                                       | -  | 10 | 12       | 69 | 56 | 65* |  |
| Rutland       | Vermont      | 47                         | 25                                      | 12 | 14 | 5*       | 4  | 13 | 1   |  |
| Brown         | Texas        | 25                         | -                                       | -  | 1  | 3        | -  | 17 | 13  |  |
| Parker        | Texas        | 23                         | 2                                       | 11 | -  | 18       | -  | 27 | 13  |  |
| Red River     | Texas        | 16                         | 2                                       | 2  | -  | -        | 14 | 11 | 26  |  |
| Richardson    | Nebraska     | 14                         | -                                       | -  | -  | 8        | 41 | 18 | 7   |  |
| McHenry       | North Dakota | 11                         | 3                                       | 21 | 14 | -        | 10 | 6  | 1   |  |

\* Epidemic control measures or community immunization programs instituted.

† Criteria for listing counties:

I. 25 cases/week for 2 consecutive weeks in a county with at least 1,000,000 population (none listed).

II. 20 cases/week for 2 consecutive weeks in a county with 500,000 to 999,999 population.

III. 15 cases/week for 2 consecutive weeks in a county with 100,000 - 499,999 population.

IV. 10 cases/week for 2 consecutive weeks in a county with less than 100,000 population.

Since June 1966, the Durham County Health Department had administered about 1,300 doses of measles vaccine, of which 700 doses have been given in November. Television, radio, and the newspapers have publicized the epidemic and have urged that all unimmunized children in

the County receive measles vaccine at the county health clinics.

(Reported by Dr. O.L. Ader, Durham County Health Director, Durham, North Carolina.)

#### EPIDEMIOLOGIC NOTES AND REPORTS SALMONELLOSIS ASSOCIATED WITH CARMINE DYE

Since the outbreak of salmonellosis traced to contaminated carmine dye in a Massachusetts hospital (MMWR, Vol. 15, No. 33), additional outbreaks have been uncovered in hospitals in California, Ohio, Oregon, and in Exeter, England. Investigation to date has established that 27 primary and 6 secondary cases of *Salmonella cubana* infection are related to contaminated dye. The cases have occurred in patients hospitalized for diagnostic studies; carmine dye is used for investigation of gastrointestinal disease. It is also extensively used as a coloring agent in foods, drugs and cosmetics.

The dye, which is manufactured in the United States, France, England, and Germany, is made from insects of the species *Dactylopius coccus*, also known as *Coccus cacti*, imported from the Canary Islands and Peru. Numerous lots of the dye have been examined by the U.S. Food and Drug Administration, the Communicable Disease Center, and several state public health laboratories; many were found positive for *S. cubana*. In addition, at least one shipment of the insects from both Peru and the Canary Islands have been found positive for *S. cubana*.

Since carmine is a natural rather than a synthetic dye, it is not subject to FDA color certification and is not required to be specifically listed on food or drug labels. The dye is used as a pharmaceutical color for tablet capsules and coatings, suspensions, and syrups. In foods it may be used in candies, chewing gum, preservatives, seasonings, ice cream, tomato extracts, and many other products. Sampling of products containing carmine dye led to the discovery that several brands of candy and a meat preservative were positive for *S. cubana*. No contamination of drugs or cosmetics has yet been reported. All of the contaminated products, including the dye, have been removed from the market.

The only cases of human illness traced to contaminated carmine dye have been in patients hospitalized for gastrointestinal diagnostic tests. Although it appears that the insects are the contaminating vehicle, specific details about the original contamination of the dye are not available at this time.

(Reported by the Salmonella Unit, Bacteriology Section, Epidemiology Branch, CDC.)

## RECOMMENDATION OF THE PUBLIC HEALTH SERVICE ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

*The Public Health Service Advisory Committee on Immunization Practices meeting on October 11, 1966, issued the following recommendations on diphtheria, tetanus, and pertussis vaccination practices and tetanus prophylaxis in wound management for the United States.*

### DIPHTHERIA, TETANUS, AND PERTUSSIS VACCINES

#### TETANUS PROPHYLAXIS IN WOUND MANAGEMENT

##### Introduction

Routine immunization against diphtheria, tetanus, and pertussis during infancy and childhood has been widely advocated and generally practiced in the United States during the past 20 years. The effectiveness of these programs is reflected in the decreasing incidence and mortality due to these diseases. The following recommendations regarding immunization have been developed on the basis of this experience and accumulated epidemiologic and immunologic data.

##### Diphtheria

There has been an accelerated decline in the annual incidence of diphtheria since the end of World War II, and diphtheria is now a rare disease in many areas of the United States. In 1965, fewer than 175 cases were reported. However, localized outbreaks continue to appear, accompanied by serious complications and a case-fatality ratio often greater than 10 percent.

The great majority of cases occur in inadequately immunized individuals. Although most diphtheria is in children, cases and deaths occur in all age groups. Diphtheria toxoid, when administered according to recommended schedules, prevents deaths and greatly reduces clinical illness and complications. Following adequate immunization, protective levels of antitoxin have been observed to persist for 10 years or more.

##### Tetanus

Although its incidence in the United States has declined in recent years, tetanus remains an important public health problem which can only be eliminated through universal active immunization. In 1964, nearly 300 cases of tetanus were reported, the majority in unimmunized adults. Of these, 180 died, a death to case ratio of more than 60 percent. Adequate immunization with tetanus toxoid provides effective and durable protection against the disease. Furthermore, prior active immunization eliminates the need for passive therapy at the time of injury, thus preventing the considerable morbidity resulting from use of heterologous animal serum. In addition, universal active immunization will prevent the significant proportion of cases occurring after trivial injury or with unrecognized portals of entry. Other benefits include the prevention of neonatal tetanus and protection to individuals in various high risk groups.

Tetanus toxoid is highly effective and almost completely free of side effects. Since it also provides long-lasting protection, it is an almost ideal immunizing agent. Because there is no natural immunity to tetanus, no general contraindications to tetanus toxoid, and since the organism is ubiquitous, the need for immunization is universal.

##### Pertussis

Pertussis with its associated high mortality is the major rationale for DTP immunization in early infancy. The disease is highly communicable, with attack rates up to 90 percent among unimmunized household contacts. Most cases are reported in infants and young children. In 1964, nearly three-fourths of pertussis deaths occurred in those under age one — some 40 percent of the total number in infants three months of age or younger. Immunization is very effective in reducing both incidence and case fatality. The mortality rate has declined precipitously since the widespread use of standardized pertussis vaccines beginning in the mid 1940's. Since the incidence and mortality decrease with age, while local and systemic reactions to the vaccine increase, pertussis immunization is not recommended above the age of six years.

##### Preparations Used for Immunization

Diphtheria and tetanus toxoids are prepared by formaldehyde treatment of the respective toxins. Pertussis vaccine is made from a killed bacterial suspension or a bacterial fraction. The toxoids and pertussis vaccines are available in both fluid and adsorbed forms. Comparative tests have shown that the adsorbed toxoids are clearly superior in antibody titer produced and in the durability of protection achieved. The promptness of antibody responses following the administration of either fluid or adsorbed toxoids as boosters is not sufficiently different to be of clinical importance. Therefore, adsorbed toxoids are the agents of choice for all primary and booster immunization.

These antigens are available in various combinations and concentrations for specific purposes. Three antigens are important for public health use:

- 1) Diphtheria and Tetanus Toxoids and Pertussis Vaccine (DTP)
- 2) Tetanus and Diphtheria Toxoids, Adult Type (Td)
- 3) Tetanus Toxoid (T)

All preparations contain comparable amounts of tetanus toxoid, but the diphtheria component in the adult type of tetanus and diphtheria toxoids (Td) is only about 10 percent of that contained in the standard DTP preparation used in infants and young children.

### Dosage

Since the antigen concentration varies in different products, the manufacturers' package inserts provide specific information regarding the volume of single doses.

### Schedules

Recommendations regarding usage of these vaccines is based upon immunologic and epidemiologic considerations, taking into account the special circumstances of school entrance and other factors important in disease transmission.

#### Primary Immunization

**Children 2 months through 6 years** (Ideally beginning at age 2-3 months or at the time of a 6-week "check-up" if such timing is an established routine.)

DTP – The recommended single dose given intramuscularly on *three* occasions at 4-6 week intervals with a reinforcing dose approximately one year after the third injection.

#### Adults and children over 6 years

Td\* – The recommended single dose given intramuscularly or subcutaneously on *two* occasions at 4-6 week intervals with a reinforcing dose approximately one year after the second.

#### Booster Immunization

**Children 3 through 6 years**, (Preferably at time of school entrance, kindergarten or elementary school.)

DTP – The recommended single dose intramuscularly.

#### Thereafter and for all other individuals

Td\* – The recommended single dose intramuscularly or subcutaneously every 10 years. (When administered as part of wound management – see specific

recommendations – a 10-year interval is determined from *that* date). More frequent routine booster doses are not indicated and may be associated with increased reactions.

### Tetanus Prophylaxis in Wound Management

An important part of the management of wounds is prevention of tetanus. The physician is often faced with decisions concerning use of tetanus toxoid for active protection and tetanus antitoxin or tetanus immune globulin (human) for passive protection. The available evidence demonstrates that primary immunization with tetanus toxoid (initial doses plus the reinforcing dose) provides a longlasting basis for active protection against tetanus. Passive protection need be considered only for the individual without a valid history of at least one injection of tetanus toxoid; indeed, there is evidence that persons who have received a single dose will respond adequately to a single booster dose, even after an interval of several years.

The following outline summarizes recommendations for the use of active and passive tetanus immunization in wound management:

1. Primary immunization or booster dose *less than* one year prior to injury:
  - a. No tetanus prophylaxis required.
2. Primary immunization or most recent booster *more than* one year prior to injury:
  - a. Td\*\* – The recommended single dose intramuscularly or subcutaneously.
3. Incompletely immunized:
  - a. Complete primary immunization (See Dosage and Schedules).
4. Unimmunized:
  - a. Initiate primary immunization (See Dosage and Schedules).
  - b. The decision to use concomitant passive prophylaxis will depend upon medical judgment after evaluating such factors as location, type and severity of the wound, degree and kind of contamination and the time elapsed between injury and medical attention. If passive therapy is elected, tetanus immune globulin (human) is strongly preferred to equine or bovine antiserum. It offers the advantages of longer protection and freedom from undesirable reactions. The currently recommended prophylactic dose of tetanus immune globulin (human) is 250 units for wounds of average severity. When used concurrently, toxoid and antitoxin should be given in separate syringes and at separate sites.

\*Td is considered the agent of choice for immunization at ages over 6 years on the basis of data regarding its effectiveness in primary immunization of older children and adults and because of increasing reactions to full doses of diphtheria toxoid with age. The use of this preparation obviates the need for Schick or Moloney testing prior to immunization.

\*\*If there is any reason to suspect hypersensitivity to the diphtheria component, tetanus toxoid (T) should be substituted for Td (adult type).

Should tetanus immune globulin (human) be unavailable, equine or bovine antitoxin may be used. The usual dose is from 3,000 to 5,000 units. Administration should always be preceded by careful screening for sensitivity. The following schema is derived from recommendations by the Committee on Trauma, American College of Surgeons:<sup>1</sup>

#### Determining Sensitivity to Equine or Bovine Serum

##### History

1. Inquire specifically regarding previous injections of equine or bovine serum. Sensitivity frequently develops after the first injection of animal serum. *If an adverse reaction occurred previously following either serum, do not consider its further use.* (The alternative product can then be subjected to the sensitivity testing described below.)
2. Question the patient with regard to sensitivity to horse dander or beef products. Either may be considered a signal for caution.

##### Skin Tests (Equine or Bovine Antitoxin)

1. Inject *intracutaneously* 0.02-0.03 ml. of 1:10 normal saline dilution of the tetanus antitoxin.\* The area of infiltration should be about the size of the head of a pin. A control test with the same volume of saline should be done for comparison.
2. In 15 minutes or less, a *positive reaction* will be manifested by a hive-like wheal and erythema. The larger the reaction, the greater the sensitivity. A 0.5 cm. wheal may represent a nonspecific response which may be confirmed by the presence of a comparable reaction to the saline alone.

##### Eye Tests

1. Place a drop of 1:10 normal saline dilution of the tetanus antitoxin in the conjunctival sac of one eye at the time of the skin test using the same material is performed. A drop of normal saline in the other eye can serve as a useful control.

2. Within 30 minutes, a *positive reaction* will be indicated by redness of the conjunctiva.
3. If no conjunctival reaction occurs following use of the antitoxin, the eye test may be considered *negative*.
4. After the result is apparent, a drop or two of epinephrine 1:1000 should be instilled in the test eye.

##### Interpretations

1. If a *positive reaction* occurs with skin and/or eye test, the animal serum employed in the testing *should not* be administered. Desensitization *should not* be attempted. The physician may either test for sensitivity to the other animal serum or endeavor to obtain tetanus immune globulin (human).
2. Following a *positive reaction* to one animal serum, the other should be subjected to the same skin and eye tests before considering its use in tetanus prophylaxis.
3. If history and both skin and eye tests are *negative*, the likelihood of a reaction to a *standard dose* of the animal serum tested is small, and it may be administered.\*  
(As an additional precaution encouraged by some, 0.1 ml. of a 1:10 normal saline dilution of antitoxin may first be injected *subcutaneously*.\* If no untoward reaction is observed in 30 minutes, the prophylactic dose may be given.)

\*Wherever animal serum is administered parenterally either for test or treatment, a syringe with 1 ml. of epinephrine 1:1000 should always be immediately available.

##### REFERENCE:

<sup>1</sup>*Early Care of Acute Soft Tissue Injuries.* The Committee on Trauma of the American College of Surgeons. W. B. Saunders Co., Philadelphia and London, 1965, pp. 25-26.

### SURVEILLANCE SUMMARY SALMONELLOSIS – August, September, and October 1966

During the months of August, September, and October 1966, the reported numbers of human isolations of salmonellae were 2,408, 1,824, and 1,721 respectively. The cumulative number of human isolations for the first 10 months of 1966 is 16,460, representing a 5.9 percent decrease from the total of 17,495 reported for the same period in 1965. The seasonal pattern continues to be similar to that observed in 1965. The age and sex distribution is similar to that in previous months. The seven most frequently reported human serotypes for the

3 months are listed in Table 1; these accounted for 65.8, 66.6, and 64.8 percent, respectively, of all isolations in each month.

The seven most frequently reported salmonellae serotypes from nonhuman sources for August, September, and October are listed in Table 2. The most prominent nonhuman sources for these months were turkeys, chickens, and livestock feed.

(Reported by the Salmonella Unit, Bacteriology Section, Epidemiology Branch, CDC.)

Table 2  
The Seven Most Frequently Reported Serotypes from Human Sources -  
August, September and October 1966

| Serotype   | August |        |         | September |        |         | October |        |         |
|--|--------|--------|---------|-----------|--------|---------|---------|--------|---------|
|  | Rank   | Number | Percent | Rank      | Number | Percent | Rank    | Number | Percent |
| <i>S. typhi-murium</i> &<br><i>S. typhi-murium</i><br>var. <i>copenhagen</i> | 1      | 778    | 32.3    | 1         | 560    | 30.7    | 1       | 525    | 30.5    |
| <i>S. heidelberg</i>   | 2      | 194    | 8.1     | 2         | 157    | 8.6     | 2       | 140    | 8.1     |
| <i>S. newport</i>  | 3      | 186    | 7.7     | 5         | 115    | 6.3     | 3       | 129    | 7.5     |
| <i>S. infantis</i>   | 4      | 125    | 5.2     | 4         | 120    | 6.6     | 5       | 91     | 5.3     |
| <i>S. enteritidis</i>  | 5      | 107    | 4.4     | 3         | 130    | 7.1     | 4       | 104    | 6.0     |
| <i>S. thompson</i>   | 6      | 98     | 4.1     | 7         | 44     | 2.4     |         |        |         |
| <i>S. saint-paul</i>   | 7      | 96     | 4.0     | 6         | 45     | 2.5     | 7       | 56     | 3.3     |
| <i>S. blockley</i>   |        |        |         | 7         | 44     | 2.4     |         |        |         |
| <i>S. typhi</i>  |        |        |         |           |        |         | 6       | 70     | 4.1     |
| Total  |        | 1,584  | 65.8    |           | 1,215  | 66.6    |         | 1,115  | 64.8    |
| Total all serotypes  |        | 2,408  |         |           | 1,824  |         |         | 1,721  |         |

Table 3  
The Seven Most Commonly Reported Serotypes from Nonhuman Sources -  
August, September and October 1966

| Serotype   | August                                     |        |         | September |        |         | October |        |         |
|--|--|--------|---------|-----------|--------|---------|---------|--------|---------|
|  | Rank                                       | Number | Percent | Rank      | Number | Percent | Rank    | Number | Percent |
| <i>S. typhi-murium</i> &<br><i>S. typhi-murium</i><br>var. <i>copenhagen</i> | 1  | 152    | 17.6    | 1         | 76     | 13.9    | 2       | 60     | 8.4     |
| <i>S. heidelberg</i>   | 2  | 78     | 9.0     | 2         | 70     | 12.8    | 1       | 113    | 15.8    |
| <i>S. anatum</i>   | 3  | 48     | 5.6     | 3         | 38     | 7.0     |         |        |         |
| <i>S. schwarzengrund</i>   | 4  | 47     | 5.4     |           |        |         | 6       | 27     | 3.8     |
| <i>S. tennessee</i>  | 5  | 44     | 5.1     |           |        |         |         |        |         |
| <i>S. derby</i>  | 6  | 38     | 4.4     |           |        |         |         |        |         |
| <i>S. thompson</i>   | 7  | 38     | 4.4     |           |        |         | 5       | 28     | 3.9     |
| <i>S. infantis</i>   |  |        |         | 4         | 31     | 5.7     | 4       | 49     | 6.9     |
| <i>S. saint-paul</i>   |  |        |         | 5         | 30     | 5.5     | 7       | 26     | 3.6     |
| <i>S. montevideo</i>   |  |        |         | 6         | 26     | 4.8     | 3       | 53     | 7.4     |
| <i>S. cubana</i>   |  |        |         | 7         | 25     | 4.6     |         |        |         |
| Total  |  | 445    | 51.5    |           | 296    | 54.3    |         | 356    | 49.8    |
| Total all serotypes  |  | 863    |         |           | 546    |         |         | 713    |         |
|  | Most Common Sources of Nonhuman Isolations |        |         |           |        |         |         |        |         |
| Turkey   | 1  | 201    | 23.3    | 1         | 152    | 27.8    | 1       | 218    | 30.6    |
| Chicken  | 2  | 152    | 17.6    | 2         | 89     | 16.3    | 2       | 128    | 18.0    |
| Livestock Feed   | 3  | 61     | 7.1     | 3         | 52     | 9.5     | 3       | 47     | 6.6     |
| Powdered Milk  | 4  | 57     | 6.6     |           |        |         |         |        |         |
| Frozen Eggs  | 5  | 32     | 3.7     |           |        |         | 4       | 44     | 6.2     |
| Sewage   |  |        |         | 4         | 38     | 7.0     |         |        |         |
| Animal Feed  |  |        |         | 5         | 23     | 4.2     |         |        |         |
| Porcine  |  |        |         |           |        |         | 5       | 41     | 5.8     |

## Morbidity and Mortality Weekly Report

## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 3, 1966 AND DECEMBER 4, 1965 (48th WEEK)

| AREA                  | ASEPTIC<br>MENINGITIS |      | BRUCellosIS | ENCEPHALITIS                        |      |                     | DIPHTHERIA |      | HEPATITIS |            |               |
|-----------------------|-----------------------|------|-------------|-------------------------------------|------|---------------------|------------|------|-----------|------------|---------------|
|                       |                       |      |             | Primary<br>including<br>unsp. cases |      | Post-<br>Infectious |            |      | Serum     | Infectious | Both<br>Types |
|                       | 1966                  | 1965 |             | 1966                                | 1966 |                     | 1965       | 1966 |           |            |               |
| UNITED STATES...      | 52                    | 47   | 12          | 37                                  | 30   | 11                  | -          | -    | 35        | 733        | 751           |
| NEW ENGLAND.....      | 4                     | 1    | -           | 2                                   | -    | -                   | -          | -    | -         | 28         | 40            |
| Maine.....            | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 3          | 5             |
| New Hampshire.....    | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | -          | 1             |
| Vermont.....          | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 1          | -             |
| Massachusetts.....    | 2                     | 1    | -           | 1                                   | -    | -                   | -          | -    | -         | 13         | 19            |
| Rhode Island.....     | 1                     | -    | -           | 1                                   | -    | -                   | -          | -    | -         | 4          | 7             |
| Connecticut.....      | 1                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 7          | 8             |
| MIDDLE ATLANTIC.....  | 19                    | 8    | -           | 10                                  | 6    | 1                   | -          | -    | 16        | 113        | 203           |
| New York City.....    | 4                     | 4    | -           | 6                                   | 1    | -                   | -          | -    | 13        | 29         | 21            |
| New York, Up-State.   | 1                     | 2    | -           | -                                   | 2    | 1                   | -          | -    | 2         | 21         | 112           |
| New Jersey.....       | 3                     | 2    | -           | 4                                   | 2    | -                   | -          | -    | 1         | 29         | 22            |
| Pennsylvania.....     | 11                    | -    | -           | -                                   | 1    | -                   | -          | -    | -         | 34         | 48            |
| EAST NORTH CENTRAL... | 3                     | 5    | -           | 6                                   | 5    | 2                   | -          | -    | 1         | 133        | 120           |
| Ohio.....             | -                     | 2    | -           | 4                                   | 1    | -                   | -          | -    | -         | 16         | 25            |
| Indiana.....          | -                     | 1    | -           | -                                   | 1    | -                   | -          | -    | -         | 13         | 8             |
| Illinois.....         | 1                     | 1    | -           | 1                                   | 1    | -                   | -          | -    | -         | 25         | 25            |
| Michigan.....         | 1                     | 1    | -           | -                                   | 1    | 2                   | -          | -    | 1         | 54         | 56            |
| Wisconsin.....        | 1                     | -    | -           | 1                                   | 1    | -                   | -          | -    | -         | 25         | 6             |
| WEST NORTH CENTRAL... | -                     | 2    | 6           | -                                   | 1    | 1                   | -          | -    | -         | 26         | 43            |
| Minnesota.....        | -                     | 2    | 4           | -                                   | -    | 1                   | -          | -    | -         | 7          | 6             |
| Iowa.....             | -                     | -    | 2           | -                                   | -    | -                   | -          | -    | -         | 12         | 6             |
| Missouri.....         | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 4          | 15            |
| North Dakota.....     | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | -          | 4             |
| South Dakota.....     | -                     | -    | -           | -                                   | 1    | -                   | -          | -    | -         | -          | -             |
| Nebraska.....         | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | -          | 3             |
| Kansas.....           | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 3          | 9             |
| SOUTH ATLANTIC.....   | 3                     | 3    | 2           | 7                                   | 7    | 1                   | -          | -    | 2         | 60         | 61            |
| Delaware.....         | 1                     | 2    | -           | -                                   | -    | -                   | -          | -    | -         | 2          | -             |
| Maryland.....         | -                     | -    | -           | -                                   | 1    | 1                   | -          | -    | 1         | 20         | 13            |
| Dist. of Columbia..   | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | -          | 2             |
| Virginia.....         | -                     | -    | 2           | -                                   | -    | -                   | -          | -    | -         | 7          | 7             |
| West Virginia.....    | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 4          | 11            |
| North Carolina.....   | 1                     | -    | -           | 2                                   | 1    | -                   | -          | -    | -         | 4          | 14            |
| South Carolina.....   | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 1          | 2             |
| Georgia.....          | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 12         | 1             |
| Florida.....          | 1                     | 1    | -           | 5                                   | 5    | -                   | -          | -    | 1         | 10         | 11            |
| EAST SOUTH CENTRAL... | 12                    | 5    | -           | 4                                   | -    | 1                   | -          | -    | 1         | 71         | 58            |
| Kentucky.....         | -                     | 5    | -           | -                                   | -    | -                   | -          | -    | -         | 24         | 30            |
| Tennessee.....        | 4                     | -    | -           | 1                                   | -    | 1                   | -          | -    | 1         | 26         | 21            |
| Alabama.....          | 2                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 12         | 3             |
| Mississippi.....      | 6                     | -    | -           | 3                                   | -    | -                   | -          | -    | -         | 9          | 4             |
| WEST SOUTH CENTRAL... | 1                     | 6    | 1           | 2                                   | 1    | 2                   | -          | -    | 2         | 55         | 44            |
| Arkansas.....         | -                     | -    | 1           | 1                                   | 1    | -                   | -          | -    | -         | 3          | 10            |
| Louisiana.....        | 1                     | -    | -           | -                                   | -    | -                   | -          | -    | 2         | 3          | 6             |
| Oklahoma.....         | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 8          | -             |
| Texas.....            | -                     | 6    | -           | 1                                   | -    | 2                   | -          | -    | -         | 41         | 28            |
| MOUNTAIN.....         | 3                     | 4    | -           | -                                   | 1    | -                   | -          | -    | -         | 82         | 35            |
| Montana.....          | -                     | -    | -           | -                                   | 1    | -                   | -          | -    | -         | 11         | 2             |
| Idaho.....            | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 24         | 1             |
| Wyoming.....          | -                     | 1    | -           | -                                   | -    | -                   | -          | -    | -         | 2          | 2             |
| Colorado.....         | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 6          | 2             |
| New Mexico.....       | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 26         | 23            |
| Arizona.....          | -                     | 2    | -           | -                                   | -    | -                   | -          | -    | -         | 9          | 4             |
| Utah.....             | 3                     | 1    | -           | -                                   | -    | -                   | -          | -    | -         | 3          | 1             |
| Nevada.....           | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 1          | -             |
| PACIFIC.....          | 7                     | 13   | 3           | 6                                   | 9    | 3                   | -          | -    | 13        | 165        | 147           |
| Washington.....       | -                     | 4    | -           | -                                   | 2    | -                   | -          | -    | -         | 22         | 11            |
| Oregon.....           | -                     | 1    | -           | 1                                   | -    | -                   | -          | -    | -         | 27         | 16            |
| California.....       | 7                     | 8    | 3           | 5                                   | 7    | 3                   | -          | -    | 13        | 115        | 101           |
| Alaska.....           | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | 1          | 14            |
| Hawaii.....           | -                     | -    | -           | -                                   | -    | -                   | -          | -    | -         | -          | 5             |
| Puerto Rico.....      | 2                     | -    | -           | 1                                   | 1    | -                   | -          | 3    | -         | 23         | 31            |

# Morbidity and Mortality Weekly Report

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CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
DECEMBER 3, 1966 AND DECEMBER 4, 1965 (48th WEEK) - CONTINUED

| AREA                    | MEASLES (Rubeola) |            |         | MENINGOCOCCAL INFECTIONS,<br>TOTAL |            |       | POLIOMYELITIS |      |           |                    | RUBELLA |
|-------------------------|-------------------|------------|---------|------------------------------------|------------|-------|---------------|------|-----------|--------------------|---------|
|                         | 1966              | Cumulative |         | 1966                               | Cumulative |       | Total         |      | Paralytic |                    |         |
|                         |                   | 1966       | 1965    |                                    | 1966       | 1965  | 1966          | 1965 | 1966      | Cumulative<br>1966 |         |
| UNITED STATES...        | 1,472             | 197,830    | 253,379 | 48                                 | 3,178      | 2,801 | 3             | -    | 3         | 88                 | 376     |
| NEW ENGLAND.....        | 27                | 2,518      | 37,192  | 3                                  | 147        | 144   | -             | -    | -         | -                  | 54      |
| Maine.....              | 11                | 285        | 2,914   | -                                  | 12         | 18    | -             | -    | -         | -                  | 12      |
| New Hampshire.....      | -                 | 80         | 383     | -                                  | 9          | 9     | -             | -    | -         | -                  | -       |
| Vermont.....            | 6                 | 323        | 1,387   | -                                  | 4          | 8     | -             | -    | -         | -                  | -       |
| Massachusetts.....      | 4                 | 825        | 19,372  | 1                                  | 62         | 54    | -             | -    | -         | -                  | 15      |
| Rhode Island.....       | -                 | 73         | 3,952   | -                                  | 17         | 17    | -             | -    | -         | -                  | 3       |
| Connecticut.....        | 6                 | 932        | 9,184   | 2                                  | 43         | 38    | -             | -    | -         | -                  | 24      |
| MIDDLE ATLANTIC.....    | 65                | 18,413     | 16,714  | 9                                  | 413        | 375   | 1             | -    | 1         | 1                  | 9       |
| New York City.....      | 6                 | 8,360      | 3,052   | -                                  | 64         | 61    | -             | -    | -         | -                  | 9       |
| New York, Up-State..... | 18                | 2,621      | 4,348   | 5                                  | 111        | 107   | -             | -    | -         | -                  | -       |
| New Jersey.....         | 34                | 1,968      | 3,187   | 1                                  | 119        | 100   | -             | -    | -         | -                  | -       |
| Pennsylvania.....       | 7                 | 5,464      | 6,127   | 3                                  | 119        | 107   | 1             | -    | 1         | 1                  | -       |
| EAST NORTH CENTRAL...   | 149               | 69,980     | 59,883  | 7                                  | 502        | 423   | -             | -    | -         | 7                  | 84      |
| Ohio.....               | 29                | 6,444      | 9,033   | 2                                  | 146        | 117   | -             | -    | -         | 2                  | 5       |
| Indiana.....            | 5                 | 5,787      | 2,255   | 3                                  | 88         | 48    | -             | -    | -         | 1                  | 13      |
| Illinois.....           | 13                | 11,486     | 3,395   | -                                  | 89         | 113   | -             | -    | -         | 3                  | 15      |
| Michigan.....           | 63                | 14,987     | 27,449  | 1                                  | 128        | 97    | -             | -    | -         | 1                  | 14      |
| Wisconsin.....          | 39                | 31,276     | 17,751  | 1                                  | 51         | 48    | -             | -    | -         | -                  | 37      |
| WEST NORTH CENTRAL...   | 89                | 9,128      | 17,211  | 4                                  | 165        | 137   | -             | -    | -         | 1                  | 15      |
| Minnesota.....          | 5                 | 1,674      | 760     | -                                  | 35         | 32    | -             | -    | -         | 1                  | 1       |
| Iowa.....               | 45                | 5,408      | 9,235   | -                                  | 22         | 12    | -             | -    | -         | -                  | 9       |
| Missouri.....           | 1                 | 538        | 2,657   | 1                                  | 64         | 54    | -             | -    | -         | -                  | 1       |
| North Dakota.....       | 37                | 1,311      | 3,982   | -                                  | 11         | 13    | -             | -    | -         | -                  | 4       |
| South Dakota.....       | -                 | 40         | 115     | 1                                  | 6          | 3     | -             | -    | -         | -                  | -       |
| Nebraska.....           | 1                 | 157        | 462     | 2                                  | 11         | 10    | -             | -    | -         | -                  | -       |
| Kansas.....             | NN                | NN         | NN      | -                                  | 16         | 13    | -             | -    | -         | -                  | -       |
| SOUTH ATLANTIC.....     | 79                | 15,883     | 26,319  | 5                                  | 536        | 530   | -             | -    | -         | 2                  | 17      |
| Delaware.....           | 1                 | 263        | 510     | -                                  | 5          | 11    | -             | -    | -         | -                  | -       |
| Maryland.....           | 2                 | 2,123      | 1,216   | -                                  | 49         | 53    | -             | -    | -         | -                  | 1       |
| Dist. of Columbia..     | 2                 | 390        | 110     | -                                  | 14         | 11    | -             | -    | -         | -                  | -       |
| Virginia.....           | 9                 | 2,239      | 4,190   | -                                  | 63         | 71    | -             | -    | -         | -                  | 3       |
| West Virginia.....      | 13                | 5,494      | 14,561  | 4                                  | 45         | 27    | -             | -    | -         | 1                  | 10      |
| North Carolina.....     | 20                | 621        | 411     | 1                                  | 134        | 110   | -             | -    | -         | -                  | -       |
| South Carolina.....     | 2                 | 663        | 1,148   | -                                  | 54         | 65    | -             | -    | -         | -                  | 1       |
| Georgia.....            | 1                 | 241        | 627     | -                                  | 77         | 61    | -             | -    | -         | 1                  | -       |
| Florida.....            | 29                | 3,849      | 3,546   | -                                  | 95         | 121   | -             | -    | -         | -                  | 2       |
| EAST SOUTH CENTRAL...   | 229               | 20,397     | 15,143  | 6                                  | 275        | 213   | -             | -    | -         | 4                  | 10      |
| Kentucky.....           | 32                | 4,809      | 3,195   | -                                  | 95         | 83    | -             | -    | -         | -                  | 5       |
| Tennessee.....          | 67                | 12,607     | 8,450   | -                                  | 92         | 68    | -             | -    | -         | -                  | 4       |
| Alabama.....            | 10                | 1,762      | 2,351   | 1                                  | 59         | 37    | -             | -    | -         | 1                  | 1       |
| Mississippi.....        | 120               | 1,219      | 1,147   | 5                                  | 29         | 25    | -             | -    | -         | 3                  | -       |
| WEST SOUTH CENTRAL...   | 358               | 26,106     | 31,706  | 7                                  | 425        | 351   | 2             | -    | 2         | 70                 | 4       |
| Arkansas.....           | -                 | 982        | 1,088   | -                                  | 36         | 18    | -             | -    | -         | 1                  | 4       |
| Louisiana.....          | -                 | 99         | 120     | 2                                  | 161        | 192   | -             | -    | -         | 1                  | -       |
| Oklahoma.....           | 40                | 578        | 233     | 1                                  | 22         | 21    | -             | -    | -         | 1                  | -       |
| Texas.....              | 318               | 24,447     | 30,265  | 4                                  | 206        | 120   | 2             | -    | 2         | 67                 | -       |
| MOUNTAIN.....           | 109               | 12,497     | 20,586  | -                                  | 94         | 100   | -             | -    | -         | -                  | 20      |
| Montana.....            | 13                | 1,903      | 3,874   | -                                  | 5          | 2     | -             | -    | -         | -                  | 3       |
| Idaho.....              | 5                 | 1,676      | 2,977   | -                                  | 5          | 13    | -             | -    | -         | -                  | -       |
| Wyoming.....            | 14                | 233        | 861     | -                                  | 6          | 5     | -             | -    | -         | -                  | -       |
| Colorado.....           | 15                | 1,407      | 5,935   | -                                  | 49         | 27    | -             | -    | -         | -                  | 7       |
| New Mexico.....         | 51                | 1,210      | 688     | -                                  | 10         | 11    | -             | -    | -         | -                  | -       |
| Arizona.....            | 6                 | 5,351      | 1,413   | -                                  | 13         | 20    | -             | -    | -         | -                  | 9       |
| Utah.....               | 5                 | 662        | 4,616   | -                                  | 1          | 17    | -             | -    | -         | -                  | 1       |
| Nevada.....             | -                 | 55         | 222     | -                                  | 5          | 5     | -             | -    | -         | -                  | -       |
| PACIFIC.....            | 367               | 22,908     | 28,625  | 7                                  | 621        | 528   | -             | -    | -         | 3                  | 163     |
| Washington.....         | 198               | 4,734      | 7,461   | 4                                  | 52         | 45    | -             | -    | -         | 2                  | 90      |
| Oregon.....             | 125               | 2,338      | 3,422   | -                                  | 40         | 36    | -             | -    | -         | -                  | 47      |
| California.....         | 31                | 15,059     | 13,490  | 3                                  | 507        | 421   | -             | -    | -         | 1                  | 22      |
| Alaska.....             | 9                 | 615        | 203     | -                                  | 18         | 18    | -             | -    | -         | -                  | 3       |
| Hawaii.....             | 4                 | 162        | 4,049   | -                                  | 4          | 8     | -             | -    | -         | -                  | 1       |
| Puerto Rico.....        | 71                | 3,356      | 2,780   | -                                  | 17         | 11    | -             | -    | -         | 1                  | -       |

## CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 3, 1966 AND DECEMBER 4, 1965 (48th WEEK) - CONTINUED

| AREA                  | STREPTOCOCCAL<br>SORE THROAT &<br>SCARLET FEVER | TETANUS |              | TULAREMIA |              | TYPHOID |              | TYPHUS FEVER<br>TICK-BORNE<br>(Rky. Mt. Spotted) |              | RABIES IN<br>ANIMALS |              |
|-----------------------|---|---------|--------------|-----------|--------------|---------|--------------|--|--------------|----------------------|--------------|
|                       | 1966  | 1966    | Cum.<br>1966 | 1966      | Cum.<br>1966 | 1966    | Cum.<br>1966 | 1966   | Cum.<br>1966 | 1966                 | Cum.<br>1966 |
| UNITED STATES...      | 9,107   | 9       | 184          | 2         | 162          | 6       | 354          | -  | 242          | 69                   | 3,732        |
| NEW ENGLAND.....      | 1,206   | -       | 4            | -         | 1            | -       | 13           | -  | 3            | 2                    | 86           |
| Maine.....            | 63  | -       | -            | -         | -            | -       | -            | -  | -            | 1                    | 26           |
| New Hampshire.....    | 24  | -       | -            | -         | -            | -       | -            | -  | -            | 1                    | 30           |
| Vermont.....          | 2   | -       | -            | -         | -            | -       | -            | -  | -            | -                    | 25           |
| Massachusetts.....    | 160   | -       | 2            | -         | 1            | -       | 9            | -  | 1            | -                    | 4            |
| Rhode Island.....     | 92  | -       | -            | -         | -            | -       | -            | -  | -            | -                    | -            |
| Connecticut.....      | 865   | -       | 2            | -         | -            | -       | 4            | -  | 2            | -                    | 1            |
| MIDDLE ATLANTIC.....  | 421   | 1       | 15           | -         | -            | -       | 57           | -  | 47           | 4                    | 221          |
| New York City.....    | 10  | -       | 5            | -         | -            | -       | 25           | -  | -            | -                    | 1            |
| New York, Up-State.   | 358   | -       | 2            | -         | -            | -       | 12           | -  | 13           | 4                    | 204          |
| New Jersey.....       | NN  | 1       | 3            | -         | -            | -       | 8            | -  | 15           | -                    | -            |
| Pennsylvania.....     | 53  | -       | 5            | -         | -            | -       | 12           | -  | 19           | -                    | 16           |
| EAST NORTH CENTRAL... | 595   | 1       | 21           | -         | 20           | 2       | 45           | -  | 20           | 9                    | 479          |
| Ohio.....             | 98  | 1       | 5            | -         | 3            | -       | 21           | -  | 9            | 3                    | 200          |
| Indiana.....          | 75  | -       | 4            | -         | 10           | 1       | 5            | -  | -            | 2                    | 111          |
| Illinois.....         | -   | -       | 4            | -         | 6            | -       | 6            | -  | 11           | 2                    | 72           |
| Michigan.....         | 239   | -       | 6            | -         | -            | 1       | 7            | -  | -            | 1                    | 42           |
| Wisconsin.....        | 183   | -       | 2            | -         | 1            | -       | 6            | -  | -            | 1                    | 54           |
| WEST NORTH CENTRAL... | 308   | -       | 15           | -         | 19           | 1       | 34           | -  | 4            | 14                   | 852          |
| Minnesota.....        | 6   | -       | 3            | -         | 1            | -       | 1            | -  | -            | 3                    | 203          |
| Iowa.....             | 139   | -       | 2            | -         | -            | -       | 5            | -  | -            | 2                    | 157          |
| Missouri.....         | 14  | -       | 8            | -         | 10           | 1       | 18           | -  | 3            | 1                    | 245          |
| North Dakota.....     | 118   | -       | -            | -         | -            | -       | 1            | -  | -            | 4                    | 53           |
| South Dakota.....     | 23  | -       | -            | -         | 4            | -       | -            | -  | -            | 2                    | 105          |
| Nebraska.....         | -   | -       | 1            | -         | 2            | -       | 2            | -  | -            | 2                    | 28           |
| Kansas.....           | 8   | -       | 1            | -         | 2            | -       | 7            | -  | 1            | -                    | 61           |
| SOUTH ATLANTIC.....   | 873   | 2       | 35           | 1         | 13           | -       | 67           | -  | 110          | 10                   | 477          |
| Delaware.....         | 11  | -       | -            | -         | -            | -       | 1            | -  | 2            | -                    | -            |
| Maryland.....         | 116   | -       | 3            | 1         | 3            | -       | 12           | -  | 26           | -                    | 3            |
| Dist. of Columbia..   | 5   | -       | -            | -         | -            | -       | 2            | -  | -            | -                    | -            |
| Virginia.....         | 288   | -       | 6            | -         | 2            | -       | 16           | -  | 31           | 2                    | 240          |
| West Virginia.....    | 245   | -       | -            | -         | 1            | -       | 1            | -  | -            | 2                    | 58           |
| North Carolina.....   | 13  | -       | 4            | -         | 3            | -       | 6            | -  | 27           | -                    | 4            |
| South Carolina.....   | 29  | -       | 2            | -         | 1            | -       | 13           | -  | 5            | -                    | -            |
| Georgia.....          | 10  | -       | 8            | -         | 3            | -       | 4            | -  | 19           | 2                    | 102          |
| Florida.....          | 156   | 2       | 12           | -         | -            | -       | 12           | -  | -            | 4                    | 70           |
| EAST SOUTH CENTRAL... | 1,550   | 1       | 26           | -         | 24           | 1       | 44           | -  | 43           | 14                   | 479          |
| Kentucky.....         | 24  | -       | 2            | -         | 2            | -       | 10           | -  | 9            | 6                    | 116          |
| Tennessee.....        | 1,070   | -       | 7            | -         | 14           | -       | 22           | -  | 25           | 8                    | 321          |
| Alabama.....          | 171   | -       | 8            | -         | 4            | -       | 6            | -  | 7            | -                    | 20           |
| Mississippi.....      | 285   | 1       | 9            | -         | 4            | 1       | 6            | -  | 2            | -                    | 22           |
| WEST SOUTH CENTRAL... | 708   | 3       | 45           | 1         | 73           | -       | 34           | -  | 10           | 8                    | 736          |
| Arkansas.....         | -   | -       | 4            | 1         | 56           | -       | 4            | -  | 2            | 2                    | 82           |
| Louisiana.....        | 2   | 2       | 12           | -         | 4            | -       | 10           | -  | -            | 2                    | 52           |
| Oklahoma.....         | 81  | -       | 3            | -         | 7            | -       | 9            | -  | 7            | 2                    | 182          |
| Texas.....            | 625   | 1       | 26           | -         | 6            | -       | 11           | -  | 1            | 2                    | 420          |
| MOUNTAIN.....         | 1,723   | -       | 2            | -         | 9            | -       | 17           | -  | 4            | 1                    | 96           |
| Montana.....          | 67  | -       | -            | -         | 2            | -       | -            | -  | -            | -                    | 7            |
| Idaho.....            | 72  | -       | -            | -         | -            | -       | -            | -  | -            | -                    | -            |
| Wyoming.....          | 63  | -       | -            | -         | 3            | -       | -            | -  | 1            | -                    | -            |
| Colorado.....         | 1,095   | -       | 2            | -         | -            | -       | 4            | -  | 2            | -                    | 18           |
| New Mexico.....       | 287   | -       | -            | -         | 1            | -       | 2            | -  | 1            | 1                    | 17           |
| Arizona.....          | 52  | -       | -            | -         | 1            | -       | 5            | -  | -            | -                    | 42           |
| Utah.....             | 76  | -       | -            | -         | 2            | -       | 5            | -  | -            | -                    | 3            |
| Nevada.....           | 11  | -       | -            | -         | -            | -       | 1            | -  | -            | -                    | 9            |
| PACIFIC.....          | 1,723   | 1       | 21           | -         | 3            | 2       | 43           | -  | 1            | 7                    | 306          |
| Washington.....       | 573   | -       | -            | -         | -            | 2       | 13           | -  | -            | -                    | 15           |
| Oregon.....           | 36  | -       | 1            | -         | -            | -       | 1            | -  | -            | -                    | 4            |
| California.....       | 1,033   | 1       | 20           | -         | 3            | -       | 27           | -  | 1            | 7                    | 287          |
| Alaska.....           | 18  | -       | -            | -         | -            | -       | -            | -  | -            | -                    | -            |
| Hawaii.....           | 63  | -       | -            | -         | -            | -       | 2            | -  | -            | -                    | -            |
| Puerto Rico.....      | 2   | -       | 53           | -         | -            | 1       | 18           | -  | -            | -                    | 18           |

# Morbidity and Mortality Weekly Report

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Week No.  
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## DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 3, 1966

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

| Area                       | All Causes |                   | Pneumonia and Influenza All Ages | Under 1 year All Causes | Area   | All Causes    |                   | Pneumonia and Influenza All Ages | Under 1 year All Causes |
|----------------------------|------------|-------------------|----------------------------------|-------------------------|--|---------------|-------------------|----------------------------------|-------------------------|
|                            | All Ages   | 65 years and over |                                  |                         |  | All Ages      | 65 years and over |                                  |                         |
| <b>NEW ENGLAND:</b>        | 770        | 456               | 30                               | 26                      | <b>SOUTH ATLANTIC:</b>   | 1,363         | 702               | 62                               | 102                     |
| Boston, Mass.-----         | 237        | 131               | 6                                | 6                       | Atlanta, Ga.-----  | 138           | 58                | 6                                | 13                      |
| Bridgeport, Conn.-----     | 47         | 29                | 4                                | 3                       | Baltimore, Md.-----  | 288           | 144               | 10                               | 14                      |
| Cambridge, Mass.-----      | 32         | 22                | -                                | -                       | Charlotte, N. C.-----  | 72            | 27                | 3                                | 5                       |
| Fall River, Mass.-----     | 36         | 25                | -                                | 1                       | Jacksonville, Fla.-----  | 85            | 47                | 3                                | 2                       |
| Hartford, Conn.-----       | 60         | 36                | 3                                | 4                       | Miami, Fla.-----   | 109           | 64                | -                                | 7                       |
| Lowell, Mass.-----         | 38         | 19                | 1                                | -                       | Norfolk, Va.-----  | 64            | 29                | 10                               | 4                       |
| Lynn, Mass.-----           | 25         | 13                | 1                                | 1                       | Richmond, Va.-----   | 88            | 43                | 4                                | -                       |
| New Bedford, Mass.-----    | 24         | 14                | 1                                | -                       | Savannah, Ga.-----   | 44            | 30                | 2                                | 3                       |
| New Haven, Conn.-----      | 41         | 30                | -                                | -                       | St. Petersburg, Fla.-----  | 102           | 78                | 8                                | 1                       |
| Providence, R. I.-----     | 69         | 36                | -                                | 6                       | Tampa, Fla.-----   | 79            | 51                | 5                                | 1                       |
| Somerville, Mass.-----     | 17         | 9                 | -                                | -                       | Washington, D. C.-----   | 249           | 105               | 10                               | 52                      |
| Springfield, Mass.-----    | 49         | 30                | 7                                | 2                       | Wilmington, Del.-----  | 45            | 26                | 1                                | -                       |
| Waterbury, Conn.-----      | 36         | 25                | -                                | 1                       |  |               |                   |                                  |                         |
| Worcester, Mass.-----      | 59         | 37                | 7                                | 2                       | <b>EAST SOUTH CENTRAL:</b>   | 649           | 345               | 24                               | 35                      |
| <b>MIDDLE ATLANTIC:</b>    | 3,673      | 2,131             | 129                              | 174                     | Birmingham, Ala.-----  | 99            | 60                | 2                                | 2                       |
| Albany, N. Y.-----         | 44         | 26                | 2                                | 5                       | Chattanooga, Tenn.-----  | 60            | 22                | 1                                | 5                       |
| Allentown, Pa.-----        | 34         | 21                | 2                                | -                       | Knoxville, Tenn.-----  | 41            | 23                | 2                                | 3                       |
| Buffalo, N. Y.-----        | 149        | 92                | 6                                | 5                       | Louisville, Ky.-----   | 112           | 72                | 9                                | 5                       |
| Camden, N. J.-----         | 61         | 39                | 4                                | 2                       | Memphis, Tenn.-----  | 155           | 76                | 2                                | 8                       |
| Elizabeth, N. J.-----      | 53         | 34                | 3                                | 1                       | Mobile, Ala.-----  | 49            | 25                | -                                | 4                       |
| Erie, Pa.-----             | 53         | 25                | 4                                | 6                       | Montgomery, Ala.-----  | 40            | 21                | 3                                | 3                       |
| Jersey City, N. J.-----    | 77         | 43                | -                                | 4                       | Nashville, Tenn.-----  | 93            | 46                | 5                                | 5                       |
| Newark, N. J.-----         | 102        | 53                | 8                                | 3                       | <b>WEST SOUTH CENTRAL:</b>   | 1,232         | 629               | 40                               | 85                      |
| New York City, N. Y.-----  | 1,879      | 1,089             | 52                               | 101                     | Austin, Tex.-----  | 56            | 34                | 5                                | 3                       |
| Paterson, N. J.-----       | 54         | 24                | 2                                | 7                       | Baton Rouge, La.-----  | 69            | 38                | 3                                | 3                       |
| Philadelphia, Pa.-----     | 512        | 304               | 13                               | 17                      | Corpus Christi, Tex.-----  | 26            | 13                | 1                                | 3                       |
| Pittsburgh, Pa.-----       | 243        | 126               | 5                                | 10                      | Dallas, Tex.-----  | 140           | 74                | 11                               | 14                      |
| Reading, Pa.-----          | 54         | 31                | 3                                | -                       | El Paso, Tex.-----   | 33            | 18                | 2                                | 3                       |
| Rochester, N. Y.-----      | 81         | 50                | 9                                | 4                       | Fort Worth, Tex.-----  | 68            | 36                | 1                                | -                       |
| Schenectady, N. Y.-----    | 28         | 21                | 2                                | -                       | Houston, Tex.-----   | 248           | 116               | 5                                | 19                      |
| Scranton, Pa.-----         | 53         | 34                | 1                                | 2                       | Little Rock, Ark.-----   | 49            | 28                | 1                                | 3                       |
| Syracuse, N. Y.-----       | 66         | 37                | 1                                | -                       | New Orleans, La.-----  | 157           | 67                | 4                                | 12                      |
| Trenton, N. J.-----        | 44         | 22                | 2                                | 4                       | Oklahoma City, Okla.-----  | 105           | 49                | -                                | 8                       |
| Utica, N. Y.-----          | 37         | 27                | 6                                | -                       | San Antonio, Tex.-----   | 146           | 80                | 3                                | 11                      |
| Yonkers, N. Y.-----        | 49         | 33                | 4                                | 3                       | Shreveport, La.-----   | 57            | 32                | -                                | 2                       |
| <b>EAST NORTH CENTRAL:</b> | 2,714      | 1,550             | 80                               | 167                     | Tulsa, Okla.-----  | 78            | 44                | 4                                | 4                       |
| Akron, Ohio-----           | 73         | 35                | -                                | 11                      | <b>MOUNTAIN:</b>   | 461           | 253               | 22                               | 33                      |
| Canton, Ohio-----          | 36         | 18                | 1                                | 5                       | Albuquerque, N. Mex.-----  | 60            | 28                | 6                                | 6                       |
| Chicago, Ill.-----         | 786        | 426               | 35                               | 55                      | Colorado Springs, Colo.-----   | 25            | 17                | 2                                | 4                       |
| Cincinnati, Ohio-----      | 168        | 107               | 3                                | 6                       | Denver, Colo.-----   | 132           | 69                | 6                                | 9                       |
| Cleveland, Ohio-----       | 232        | 124               | 3                                | 17                      | Ogden, Utah-----   | 14            | 11                | -                                | 1                       |
| Columbus, Ohio-----        | 118        | 61                | 2                                | 8                       | Phoenix, Ariz.-----  | 104           | 57                | 5                                | 8                       |
| Dayton, Ohio-----          | 63         | 36                | -                                | 3                       | Pueblo, Colo.-----   | 17            | 11                | 2                                | -                       |
| Detroit, Mich.-----        | 336        | 195               | 5                                | 14                      | Salt Lake City, Utah-----  | 56            | 29                | -                                | 4                       |
| Evansville, Ind.-----      | 46         | 29                | 2                                | 1                       | Tucson, Ariz.-----   | 53            | 31                | 1                                | 1                       |
| Flint, Mich.-----          | 61         | 30                | 4                                | 4                       | <b>PACIFIC:</b>  | 1,748         | 1,038             | 38                               | 75                      |
| Fort Wayne, Ind.-----      | 45         | 29                | 3                                | 4                       | Berkeley, Calif.-----  | 22            | 15                | 1                                | -                       |
| Gary, Ind.-----            | 30         | 12                | -                                | 4                       | Fresno, Calif.-----  | 65            | 35                | -                                | 4                       |
| Grand Rapids, Mich.-----   | 43         | 32                | 3                                | 2                       | Glendale, Calif.-----  | 42            | 28                | 1                                | 1                       |
| Indianapolis, Ind.-----    | 192        | 114               | 5                                | 14                      | Honolulu, Hawaii-----  | 44            | 19                | 1                                | 4                       |
| Madison, Wis.-----         | 31         | 15                | -                                | -                       | Long Beach, Calif.-----  | 88            | 51                | -                                | 3                       |
| Milwaukee, Wis.-----       | 141        | 90                | 1                                | 5                       | Los Angeles, Calif.-----   | 554           | 334               | 18                               | 28                      |
| Peoria, Ill.-----          | 44         | 28                | 1                                | 3                       | Oakland, Calif.-----   | 125           | 75                | -                                | 3                       |
| Rockford, Ill.-----        | 31         | 22                | 3                                | 2                       | Pasadena, Calif.-----  | 25            | 19                | -                                | -                       |
| South Bend, Ind.-----      | 60         | 36                | 3                                | 4                       | Portland, Oreg.-----   | 144           | 85                | 3                                | 3                       |
| Toledo, Ohio-----          | 119        | 78                | 5                                | 2                       | Sacramento, Calif.-----  | 76            | 46                | -                                | 6                       |
| Youngstown, Ohio-----      | 59         | 33                | 1                                | 3                       | San Diego, Calif.-----   | 82            | 43                | -                                | 7                       |
| <b>WEST NORTH CENTRAL:</b> | 911        | 562               | 32                               | 46                      | San Francisco, Calif.-----   | 202           | 113               | 2                                | 6                       |
| Des Moines, Iowa-----      | 85         | 55                | 2                                | 4                       | San Jose, Calif.-----  | 37            | 24                | 4                                | 2                       |
| Duluth, Minn.-----         | 25         | 18                | 1                                | 1                       | Seattle, Wash.-----  | 132           | 79                | 5                                | 4                       |
| Kansas City, Kans.-----    | 44         | 21                | 4                                | 6                       | Spokane, Wash.-----  | 70            | 45                | 2                                | 3                       |
| Kansas City, Mo.-----      | 139        | 90                | 5                                | 6                       | Tacoma, Wash.*-----  | 40            | 27                | 1                                | 1                       |
| Lincoln, Nebr.-----        | 37         | 23                | 2                                | 3                       |  |               |                   |                                  |                         |
| Minneapolis, Minn.-----    | 108        | 70                | 1                                | 9                       | <b>Total</b>   | <b>13,521</b> | <b>7,666</b>      | <b>457</b>                       | <b>743</b>              |
| Omaha, Nebr.-----          | 98         | 64                | 2                                | 3                       | Cumulative Totals<br>including reported corrections for previous weeks |               |                   |                                  |                         |
| St. Louis, Mo.-----        | 277        | 157               | 9                                | 11                      | All Causes, All Ages-----  |               |                   |                                  | 600,251                 |
| St. Paul, Minn.-----       | 60         | 40                | 2                                | 3                       | All Causes, Age 65 and over-----                                       |               |                   |                                  | 343,715                 |
| Wichita, Kans.-----        | 38         | 24                | 4                                | -                       | Pneumonia and Influenza, All Ages-----                                 |               |                   |                                  | 24,542                  |
|                            |            |                   |                                  |                         | All Causes, Under 1 Year of Age-----                                   |               |                   |                                  | 32,065                  |

\*Estimate - based on average percent of divisional total.

## QUARANTINE MEASURES

*Immunization Information for International Travel*  
1965-66 edition — Public Health Service Publication No. 384

## Section 2, page 13

Delete the information under Typhoid and Paratyphoid fever.

## Insert:

Typhoid Fever — Immunization is recommended for foreign travel as a personal and public health precaution. Standard course: 2 injections at least 4 weeks apart. A booster dose at 3 year intervals while in an infected area. The basic series need not be completed at any time even if more than 3 years has elapsed since primary immunization or the last booster dose. Infants may be immunized from 6 months of age. (For typhoid vaccine dosage as recommended by the PHS Advisory Committee on Immunization Practices see Morbidity and Mortality Report, Vol. 15, No. 29, July 23, 1966).

All information concerning paratyphoid fever vaccination (pages 20-71) should be deleted.

## Section 2, page 15

Under Plague, delete "The standard course need not be repeated at any time."

## Insert:

Persons vaccinated previously need only 2 injections spaced at a 30-day interval.

*Health Information for Travel Leaflets*  
748, 748B through 748D

- 748 — Travel in Europe
- 748B — Travel in Mexico, Central and South America and the Caribbean
- 748C — Travel in Asia, Japan, Indonesia, Philippines, Australia and New Zealand
- 748D — Travel in Africa

Delete all reference to typhoid and paratyphoid fever and insert the above information concerning typhoid fever.

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ACTING CHIEF, STATISTICS SECTION

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IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
COMMUNICABLE DISEASE CENTER  
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE CDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

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